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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,645	08/30/2001	Wolfgang Muschik	NHL-SCT-27	9404
432	7590	05/20/2004	EXAMINER	
NILS H. LJUNGMAN & ASSOCIATES			VINCENT, SEAN E	
P. O. BOX 130			ART UNIT	
GREENSBURG, PA 15601-0130			PAPER NUMBER	

1731

DATE MAILED: 05/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/943,645

Applicant(s)

MUSCHIK ET AL.

Examiner

Sean E Vincent

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2004.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.  
4a) Of the above claim(s) 16-20 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-15 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 30 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

***Election/Restrictions***

1. Applicant's election with traverse of February 26, 2004 is acknowledged. The traversal is on the ground(s) that "groups I-IV are so closely related to one another that their examination could be most efficiently and effectively carried out in a single application. This is not found persuasive because it does not point out the supposed errors in the restriction requirement.

The requirement is still deemed proper and is therefore made FINAL.

***Information Disclosure Statement***

2. The information disclosure statement filed January 9, 2002 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each reference that is not in the English language. It has been placed in the application file, but the non-patent articles referred to therein have not been considered.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 1, 8 and 12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Schumacher et al (EP 261 725). The features of applicant's claims can be found in the abstract, page 2, lines 34-44, page 3, lines 30-58, and page 4, lines 1-13.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schumacher et al.

8. Schumacher et al taught applicant's claimed invention except for a specific recitation of bubbling oxygen beneath a batch blanket. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to bubble the oxygen beneath a batch blanket

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in Schumacher et al because a person of skill in the art would have expected the agitation of the glass melt to have a further advantage of mixing in unmelted glass batch materials.

9. Claims 4-7, 9-11 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schumacher et al in view of Haft et al (DE 4313217 C1).

10. Schumacher et al taught applicant's claimed invention except for the gas mixtures of claims 9 and 13. Haft et al taught that it was known to bubble nitrogen or water vapor along with oxygen into a glass melt being refined (see English language abstract by Derwent). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include nitrogen or water vapor in a gas mixture with oxygen in the process of Schumacher et al because Schumacher et al taught that it was possible to use oxygen mixed with inert gases.

11. Schumacher et al and Haft et al did not teach lithium-aluminum-silicate glasses. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the known refining processes of Schumacher et al and Haft et al to any commonly used glass composition, as taught by Schumacher et al.

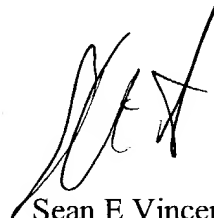
***Conclusion***

12. The prior art made of record and not relied upon is cited to further show the state of the art.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean E Vincent whose telephone number is (571) 272-1194. The examiner can normally be reached on M - F (8:30 - 6:00).

14. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P Griffin can be reached on (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

15. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sean E Vincent  
Primary Examiner  
Art Unit 1731

S Vincent